unintelligible to foreigners, even to those who are good Latin scholars. As one of the chief advantages of the uniform Latin nomenclature of plants is that thus a sort of universal or international language is created, it is evident how much has been lost by our prejudiced adherence to a provincial mode of pronunciation."

After much consideration and consultation with several eminent botanists, the writer determined to follow the Roman system of pronunciation in his article. He proceeds to give the essentials as to accentuation, quantity, and the pronunciation of particular letters, practically as given in the rules set forth above.

"It will be as well to guard the reader against the supposition that there exists at present for botanical names any recognized standard of pronunciation from which he may imagine that this dictionary often presumes to depart. The fact is that there is no such established standard. In many cases the common text-books are utterly at variance, and the usage, not only of good gardeners, but of educated botanists is often hopelessly divergent."

In but one point of importance, (and that is in fact of but minor importance,) are the rules different from those printed above. Mr. Miles says that *in all cases* of words commemorative of the names of men, we should pronounce the word "as nearly as possible in the way in which the name to be commemorated was sounded." Thus he would have us say *Stokes-i-a*, not *Sto-ke-si-a*, *Men-zies-i-i*, not *Men-zi-es-i-i*. We are of the opinion that the rule of the Seminar, given above, is preferable, and will in the end lead to the best results.—*Charles E. Bessey.*

ZOOLOGY.

SOME CASES OF SOLID-HOOFED HOGS AND TWO-TOED HORSES.—In 1878 "soliped" pigs were reported from Texas. Dr. Coues observed that in the new breed the terminal phalanges of the toes were united, to form a single broad phalange; above this, however, the other two phalanges remained perfectly distinct. The hoof is perfectly solid, and on its sole there was a broad, angular elevation of horny substance, curiously like the frog of the horse's hoof. The breed was so firmly established that no tendency to revert to the original and normal form was then observable. It was further stated

that, in the cross of a solid-hoofed boar with a sow of the ordinary type, a majority of the litter has the peculiarity of the sire apparent.

There has just been reported to me from Sioux City, Iowa, (famous for its annual "corn palace") a similar case. Indeed, it would seem as if the owner was quite alive to their rarity and had been breeding them for some time, and had now as many as induced him to advertise them for sale, "not alone for being a curiosity, *but in a commercial sense a valuable production for mankind!*" The owner continues: "The experience of the writer convinces him that there is no better hog for the healthy growth of pork. These hogs are of long body, and have well proportioned hams and shoulders. It is true they have not the fine head of the 'improved' breeds. . . In size they are fair, a couple of barrows (accidently castrated) now near thirteen months old, without special care weigh over 350 pounds each. As yet there has been no sign of any loss from disease whatever (though diseases have been common in that district for years). A few boars, six to eight weeks old, will be sold . . . ." etc.

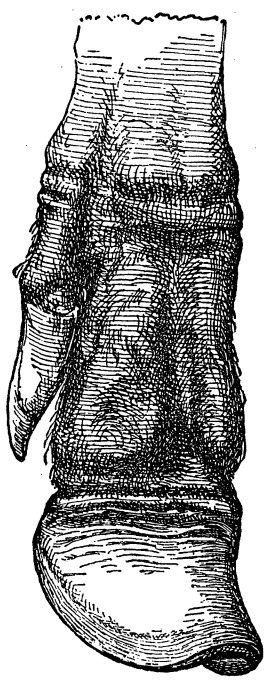

Fig. 1. Solid-hoofed Hog.

We are making further inquiries into the above, and will report results.

But it seems quite evident that these "mule-footed" hogs are of frequent occurrence in America. Some "get into print," and some don't. For instance we are obliged to the *Rural New Yorker* for two more cases. A known correspondent to that excellent periodical writes thus, from Cottonville, Louisiana, in the issue for September 22d: "As a curiosity which I never saw before, or even heard of, I send the foot of a 'mule-footed' hog. There is a herd of them ranging the woods, about eight miles north of Baton Rouge. None of the old settlers can give me any further information concerning them than "that they are a herd of wild hogs.'" An exact drawing is published with the above, which is enclosed for your reproduction. (Fig. 1.) The editor adds a note to

the above: "We have seen several of these 'mule-footed' hogs. In a small Southern town, a large Poland-China boar had one hind foot exactly like the one shown in our picture, and a large proportion of the young pigs from him were marked in the same way."

We have also had undoubted cases of extra-toed horses reported here. During the summer of 1885, *The Advertiser*, Constantine, this State, contained the following: "On Wednesday night of last week a mare belonging to Mr. Fred Hagenbuch, of Fabius, gave birth to a male colt, well formed and perfectly symmetrical in all respects, except that one of the feet is cloven and hoofed like the foot of a cow. Who has a mate for this colt?" This was quoted in *Breeder's Gazette*, Chicago, the leading breeder's paper of America, and brought out a response from Mr. N. C. Woolf, in issue for July 16th, thus: "My neighbor, Mr. D. M. Hall, has a two-year-old colt that exactly fills the above description. For a few months Mr. Hall has taken great pains in shoeing, and thinks he will succeed in making a pretty good hoof."

These cases are, I think, of sufficient interest to entitle them to be rescued from the oblivion that they must experience. And they are, I think, of sufficient value to have a place accorded them in THE NATURALIST.—*R. C. Auld*, Pinckney, Michigan, U. S. A.

INTERESTING CASES OF COLOR VARIATION.—As a contribution to the increased interest attaching to the recent discussions of color variation in animals, as bearing upon the problems of natural selection, the following may not be without value. The first is that of some remarkable variations in color in the common robin, Merula migratoria. Some two years ago, in the Spring of 1887, while studying the habits of this bird, strolling almost daily into their haunts, I was much struck by what at first appeared a strange bird among a group of robins. A moment's attention, however, disclosed the true character of the stranger, and showed it to be strange only in the matter of color, which was a motley of white and gray on the head, neck, shoulders and back. Though having no means of securing the specimen at the time, an attentive study of the marking showed that it could not be a case of albinism, as is so often the case in such variations. The bird was not seen for that time only, but I saw the same specimen a few days later, and then repeatedly during the Spring, as it proved to be a female, and nested near my home. No propagation of the variation appeared in the offspring that was appreciable.

The following Spring I noted evidently the same bird in the same locality, and at about the same time in the season. It remained in the neighborhood during the Summer, again nesting. In neither season did there appear any signs of transmission of the peculiarity to the offspring.

A robin similarly marked was noted by Mr. Amos. W. Butler, and reported by him through the Journal of the Cincinnati Society of Natural History. Altogether, the cases seem rather anomalous and outside the usual causes involved in such variation.

Another case of similar character came under my observation later. In the Spring of 1888 I captured two *moles*, *Scalops aquaticus* (?) on my lawn, both of which had markings of pure white on the neck and belly. In another specimen, only the skin of which I saw, but which was taken in the neighborhood, the white extended on one side to the back in irregular blotches, giving to the skin a strangely variegated appearance. As is well known, the color of this mammal is quite constant, and of a dark plumbeous or slaty hue, slightly lighter below. I have seen no record of a tendency to vary in the manner noted above, or indeed in any way in particular. The usual color is, of course, quite in keeping with its habits and environment, and in so far might be assumed as the result of natural selection. But how are we to account for these peculiar variations? Are they the expression of a tendency to revert to a primitive or to an ancestral type, or are they not rather in keeping with what is so often seen in plants as well as in animals under changed conditions, due to causes obscure in their nature and as yet very imperfectly understood? The recent discussions of these matters by Agassiz, Riley, and others, and the reference of Mr. Adam Sedgwick in a recent number of *Nature*, to the remarkable coloration in Peripatus, when its habits are taken into account, seem to lend great plausibility to the principle of "Saltation," or sudden and obscure variation.

Altogether, there seems reason for moderation in reference to *any theory* as yet proposed. Evidently, the evidence is not yet all in.—*C. W. Hargitt*, Miami University, Mar. 25, 1889.

THE BALD CHIMPANZEE.—Dr. P. L. Sclater describes in *Nature* (1889, p. 254), a couple of female apes from tropical West Africa, which resemble the chimpanzee, and yet differ in marked features. The ear is much larger, and the hair is generally sparse, so much so on the head as to permit the application of the term bald. The color of the face is blackish. In

the chimpanzee the head is thickly clothed with hair, the face is flesh-colored, and the ears are smaller. Both these animals (which are in the London Zoological Garden) are carnivorous, catching and eating sparrows and pigeons. It is stated that this is never done by the chimpanzee. Dr. Sclater provisionally refers these animals to the *Anthropopithecus calvus* of Du Chaillu.

ZOOLOGICAL NEWS.—CŒLENTERATA.—Dr. H. V. Wilson records (*J. H. U. Circ.*, No. 70) that in *Cereactis bahamensis* the mouth occasionally grows together in the middle, leaving oval and anal openings at the ends. He also found a single larva of *Manicina areolata*, which exhibited the same peculiarity. In this connection reference is made to Sedgwick's celebrated paper on Metameric Segmentation.

In the same place Prof. J. P. McMurrich gives a list of the Actinaria of New Providence, enumerating fourteen species, of which *Cereactis bahamensis*, *Bunodes tæniatus*, *Aulactinia stelloides*, and *Gemmaria isolata* are new. The fact is also recorded that *Aulactinia stelloides* passes through an Edwardsia stage when eight nusenteries are present and the longitudinal muscles are arranged as in that genus.

ENTOMOLOGY.[1]

OBSERVATIONS ON ANTS, BEES, AND WASPS.[2]—Sir John Lubbock has published the eleventh part of his observations. He is of opinion that, though there may be nests of *Formica sanguinea* without slaves, an experiment which he has made seems to indicate that the slaves perform some important functions in the economy of the nest, though it is not yet determined what that function exactly is.

With regard to Ant-guests, he points out that Dr. Wasman has confirmed his observations, in opposition to Lespès, that, while ants are deadly enemies to those of other nests, even of the same species, the domestic animals may be transferred from one nest to another, and are not attacked. Attention is next drawn to Professor Emery's observations on mimicry among ants.

With regard to the color sense, Professor Graber has confirmed Sir John's observations on Ants and Daphnias, by

[1] This department is edited by Prof. J. H. Comstock, Cornell University, Ithaca, N. Y., to whom communications, books for notice, etc., should be sent.

[2] Journ. Linn. Soc. Lond., xx., (1888) pp. 118-36. 1889.